

*Citation for published version:*

Olaosebekan, O & Adams, M 2014, 'Prospects for micro-insurance in promoting micro-credit in sub-Saharan Africa', *Qualitative Research in Financial Markets*, vol. 6, no. 3, pp. 232 - 257. <https://doi.org/10.1108/QRFM-09-2012-0028>

*DOI:*

[10.1108/QRFM-09-2012-0028](https://doi.org/10.1108/QRFM-09-2012-0028)

*Publication date:*

2014

*Document Version*

Peer reviewed version

[Link to publication](#)

This is the Author's Accepted Manuscript of an article published in Olaosebekan, O & Adams, M 2014, 'Prospects for micro-insurance in promoting micro-credit in sub-Saharan Africa' *Qualitative Research in Financial Markets*, vol 6, no. 3, pp. 232 - 257., and available online via: <http://dx.doi.org/10.1108/QRFM-09-2012-0028>

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# **Prospects for Micro-Insurance in Promoting Micro-Credit in Sub-Sahara Africa**

## **1. Introduction**

Micro-insurance is part of the growing international micro-finance industry that emerged in the 1970s with an estimated potential market in less-developed countries of up to four billion policies (Swiss Re, 2010) <sup>1</sup>. By protecting the consumption patterns of low income groups (i.e., those on less than US\$4 per day) from the vulnerability of life cycle shocks (e.g., death or disability) micro-insurance is increasingly being spouted as a 'self-empowered social protection' solution to world poverty and a key driver for economic growth and entrepreneurial development in developing countries (Loewe, 2006; Churchill, 2007; Churchill, Phillips and Reinhard, 2011). Specifically, as a risk transfer mechanism, micro-insurance provides micro-finance institutions (MFIs) and their borrowers with 'contingent collateral' which enables them to reduce credit risk and lower the transaction costs of micro-credit (i.e., small value unsecured business loans). Despite the importance of micro-finance and micro-insurance to the socio-economic development of the world's poor their financial needs are not usually well-served by local institutions and markets (Islam and Maitra, 2011). This situation presents financial corporations with strategic opportunities for profitable growth and as such, warrants more research attention from business and management scholars. Indeed, Bruton, Khavel and Chavez (2011, p. 1) acknowledge that "... selling to the world's poor may be the last great market frontier in international business". However, despite its evident business and development potential, academic management research on micro-insurance, and in particular, its role in supporting micro-finance initiatives, is still very much at an embryonic stage (Churchill et al, 2011). Our study thus seeks to fill this knowledge gap.

In this paper we employ a case study research design focused on three major MFIs to examine the prospects for micro-insurance in

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<sup>1</sup> As Islam and Maitra (2011) make clear, the term micro-finance includes not just micro-credit (loans) and micro-insurance but also small scale savings and investments, and other financial services.

promoting micro-credit in the Gambia - a typical less-developed country in sub-Saharan Africa. Doz (2011) argues that as case studies can help inform our understanding of complex environments they are particularly apt research methods for scholars studying business and management issues in developing countries. Specifically, we address two research questions in the present study: First, what is the most appropriate organizational structure to maximize the economic benefits of micro-insurance? Second, what are the financial management and wider economic benefits of the use of micro-insurance by micro-lenders?

The first question is important because the effectiveness of micro-insurance in providing collateral for micro-loans, and ultimately the profitability of micro-insurance, will be affected by the ability of MFIs to overcome market imperfections arising from information asymmetries (adverse selection and moral hazard), and agency conflicts with prospective borrowers (Townsend, 1994; Platteau, 1997; Loewe, 2006). This will also impact on the profitability of micro-insurance and its future market supply. Therefore, how effective organizational structure is in controlling information asymmetries and agency problems is an empirical question of some importance.

The second question is related to the first but it has more of a macro-level public policy focus. For example, if micro-insurance reduces financial risk for borrowers and lenders it can stimulate the demand for, as well as the supply of, micro-finance. In turn, this can spur self-motivated entrepreneurship and economic growth that can have multiplier effects across the wider macro-economy. We believe that our case study research approach that explicitly accounts for the socio-economic institutional conditions underpinning the management of risks and uncertainties faced by low income groups in sub-Saharan Africa should help to shed light on the foregoing questions.

Our research protocol is informed by the organizational economics literature which provides a well-established conceptual framework for explaining observed behaviour in insurance and credit markets, particularly in Western developed economies (e.g., see Arrow, 1963; Rothschild and Stiglitz, 1976). This body of literature explicitly recognizes that potential information asymmetry problems (adverse selection and moral hazard) and agency incentive conflicts are prevalent in insurance

and credit transactions. In this context, organizational structures and contracting features emerge to mitigate such problems and ensure that markets operate efficiently. However, extant organizational economics theory has its limitations. For example, it gives scant attention to such issues as the perception, transfer, and sharing of risks in different socio-cultural contexts such as those based on locality (community), ethnicity (tribe), or some other characteristic (e.g., based on gender or religious faith). Yet such institutional features typify the business environments of less-developed countries such as those of sub-Saharan Africa (Udry, 1994; Akotey, Osei and Gemegah, 2011; Giesbart, Steiner and Bendig, 2011). Therefore, by considering the effects of such institutional factors on the micro-credit/micro-insurance relation our case study approach contributes, in a modest way, to the elaboration of theory from the 'bottom-up' (Eisenhardt, 1989; Eisenhardt and Graebner, 2007; Doz, 2011; Welch, Piekkari, Plakoyiannaki, and Paavilainen-Mäntymäki, 2011). The insights obtained from our Gambia-based research could also be generalized to developing countries elsewhere in sub-Saharan Africa, and indeed, other parts of the developing world. Consequently, the study could be of interest and relevance to international financiers (e.g., the World Bank), aid agencies, governments, and other development organizations (Easterly, 2009).

The remainder of our paper is structured as follows. Section 2 provides background information on the Gambia and motivates the country as the institutional setting for our research. Section 3 provides information on the theoretical context of the study. Section 4 describes the case study methodology employed to address the research questions and section 5 discusses our findings. Finally, section 6 of the paper draws conclusions from our research, identifies its limitations, and considers the potential commercial and public policy implications.

## **2. Institutional Setting**

With a geographical area of 4,363 square miles (11,300 square kilometres) and a population in 2010 of approximately 1.72 million (90% of which is Muslim) the Gambia is the smallest country in sub-Saharan Africa (World Bank, 2010). However, the Gambia is deemed to be a good institutional environment within which to focus this study as the local

economy is a microcosm of sub-Sahara Africa - for example in terms of low gross domestic product (GDP) per capita (US\$426 in 2010), wide national income dispersion (2010 Gini coefficient = 0.47), a relatively large and growing balance of trade deficit (-16% of GDP in 2010), and heavy economic reliance on the primary sector (e.g., agriculture and quarrying) (Organization for Economic Cooperation and Development, 2009; International Monetary Fund, 2010). Demographically, the population of the Gambia is made up of four main ethnic groups – Mandinka (48% of the population); Fula (18% of the population); Wolof (16% of the population); and Jola (10% of the population) with the remainder made up of various other races including Arabs and Europeans. Easterly and Levine (1997) contend that socio-cultural fragmentation is a distinctive feature of less-developed countries in sub-Sahara Africa. They aver that this institutional feature could help explain generally low levels of local economic development in such low income countries (e.g., because ethnic diversity fosters the promotion of sectional socio-political interests). Whilst rural communities in the Gambia are distinguished by tribal and kinship ties centred on villages, the urban areas (e.g., around the capital Banjul) are ethnically mixed.

[Insert Table 1 here]

Table 1 shows that compared with the two main economies of West Africa – Ghana and Nigeria – the Gambia has a much lower GDP per capita but similar levels of income disparity (as measured by the gini coefficient) though interestingly, the Republic of South Africa (RSA) - the continent's most advanced economy - has the largest gini index at 0.58. Roughly 60 percent of Gambia's population subsist on low incomes ( $\leq$  US\$ 4 per day) with 36% of the population living in extreme poverty ( $\leq$  US\$ 2 per day). Table 1 thus indicates that the Gambia's current socio-economic position is comparable with sub-Sahara Africa as a whole (excluding the RSA). Moreover, the levels of national income disparity and poverty for the sub-Sahara African countries listed in Table 1 are much higher than the Latin American countries of the Dominican Republic and Guatemala studied in Bruton et al. (2011) (where gini coefficients were about 0.37 and with about 40% of the population on low incomes). Such comparative

statistics therefore underpin the importance of micro-finance and micro-insurance initiatives to the economic development of sub-Saharan Africa.

[Insert Table 2 here]

Table 2 gives the key features of the financial services sector in the Gambia. Gambia currently has 11 banks of which four are foreign-owned (one British and three Nigerian) and one an Islamic bank. Unlike some other developing countries (e.g., India), the Gambia (like most other countries of sub-Saharan Africa) does not have a public sector insurer which subsidizes insurance protection for low income groups. Again, in common with other sub-Saharan African countries the rate of insurance penetration per capita (measured as annual premiums written as a proportion of GDP per head) is only about 1%-2% compared with 15%-20% in developed economies (Roth, McCord and Liber, 2007; Akotey et al., 2011; Giesbart et al., 2011). Additionally, as with other predominantly Islamic countries roughly 80%-90% of domestic insurance in the Gambia is written on non-life products such as motor vehicle and property insurance (e.g., see Abdul Kader, Adams, and Hardwick, 2010). Currently, 12 local stock-owned insurance companies operate in the domestic market including one Islamic (takaful) insurer.

Currently, 80 (Central Bank licensed) MFIs operate in the Gambia. Of this number, 70 or so entities are small savings and credit associations (with generally less than 50 members) that operate in rural villages. In addition, there are about 10 larger (urban-centered) MFIs that account for most micro-loans (90% by value) and micro-savings (75% by value) in the Gambia. The three case studies in the present study were drawn from this larger group of Gambian MFIs. In most of the MFIs based in the Gambia (big and small) a savings record (of at least 1-3 years) is normally required before micro-credit is given to individuals. Micro-insurance in the Gambia is at a very early stage of development and where it does exist, it tends to cover micro-borrowers for the value of the outstanding loan in the event of death and/or disability. In this regard, the micro-insurance market in the Gambia mirrors closely that of the rest of sub-Saharan Africa (Swiss Re, 2010).

As well as being a typical example of a sub-Saharan African economy, the Gambia is also considered to be a good environment within which to conduct our research for other reasons. For example, as in other less-developed countries many small-scale business ventures in the Gambia are initiated by women through female business associations (e.g., see McPherson, 1996). Insights into the potential of micro-insurance for increasing female empowerment in small scale business venture would be clearly relevant to local policymakers, international development and aid agencies as well as scholars of international business. Additionally, the extent to which local community and Islamic influences might prospectively influence local micro-lending/micro-insurance buying decisions and the subsequent management of risk issues is another potentially interesting angle that we investigate in the present study.

### **3. Theoretical Overview**

This section provides a brief overview of the organizational economics literature used to guide and inform our study.

#### ***3.1. Information asymmetry problems: Adverse selection and moral hazard***

Rothschild and Stiglitz (1976) demonstrated that adverse selection is all-pervasive in insurance transactions due to information asymmetries between the insurer and the insured at the point-of-sale. As a result, the shareholders/managers of insurance companies have to control such problems through ex-post monitoring, and the use of costly contractual mechanisms such as the use of restrictive covenants, differential risk pricing for given levels of indemnity cover, and deductibles (i.e., risk-sharing mechanisms). In their West African study, Criel, Stuyft and Lerberghe (1999) found that adverse selection is a particularly acute problem in medical insurance because high risk individuals whose present health status can determine their near-future health-care needs (e.g., pregnant women or females of child-bearing age) are the ones most likely to benefit from, and thus purchase, medical insurance ex-ante. However, in his study of local village-based risk management practices in rural India Townsend (1994) found that restricting membership of local community insurance pools to those within a known pre-defined threshold of

acceptable health risk significantly reduced adverse selection problems and the associated transaction costs of insurance (e.g., health screening expenditures).

The other common information asymmetry problem in insurance markets - moral hazard - arises where the outcome of the insurance contract can be influenced by the (unobserved) actions of the insured after the insurance policy has been taken out (Arrow, 1963). Again moral hazard induces insurers to use contractual mechanisms (e.g., deductibles) and engage in costly direct monitoring activities in order to minimize its effect on the profitability of their business. However, recent research by Paal and Wiseman (2011) reports that in less-developed parts of the world, such as rural communities in sub-Saharan Africa, social sanctions and close community monitoring can be especially effective in mitigating moral hazard problems and reducing the agency costs of contractual monitoring and enforcement.

### ***3.2. Information asymmetry, agency problems and organizational form***

Mayers and Smith (1981, 1988) argue that in restricting the sale of insurance policies to contributors of capital (i.e., by merging the customer-owner functions) mutual forms of organization effectively reduce agency costs between fixed claimants (policyholders) and residual risk-bearers (shareholders). This 'gate-keeper' function of mutual/cooperative-type organizational structures gives them competitive advantages in insurance markets as it is cost-efficient and effective in controlling adverse selection (Smith and Stutzer, 1990, 1995). Smith and Stutzer (1990, 1995) also contend that risk-sharing among contributors to the mutual insurance pool promotes trust-building and ensures that members of the mutual group are motivated to act with due care and attention, and integrity ex-post. Bruton, Ahlstrom and Puky (2009) also report that in mutually structured micro-finance situations members are invariably bounded by implicit obligations to their fellow members and often incur social penalties (e.g., loss of public reputation) if debt covenants are contravened even in cases of involuntary lapses such as death and disability. Such sanctions can also reduce moral hazard effects on micro-finance arrangements. Laux and Muermann (2010) add that another



potential advantage of the mutual form is that as risk capital is provided by policyholders, the free-rider and contractual commitment problems as well as the cost of capital can be reduced via bonus-based participatory rights insurance contracts that confer policyholders the right to annual and terminal surpluses generated by the insurance pool. This attribute effectively internalizes the frictional costs of raising capital needed to underwrite insurance risks.

On the other hand, Mayers and Smith (1981, 1988) acknowledge that shareholders of stock insurance companies could be more effective than the members of mutual/cooperative organizations in controlling market imperfections. For example, majority shareholders can be more efficient monitors of agents (managers) activities compared with the more disparate customer-owners of mutual funds. Shareholders can also use their voting rights to discipline aberrant managers through the annual general meeting and ultimately (and probably more likely in developed economies), to control the activities of managers through the market for corporate control. Therefore, the profitability of mutual/cooperative-type of organizations will not necessarily be better than the profitability of stock companies. In fact, some recent studies of group risk-sharing arrangements in rural communities in less-developed countries (e.g., Murgai, Winters, Sadoulet, and de Janvry, 2002) provide evidence that rejects the notion that mutual pools are always Pareto-optimal efficient. Murgai et al. (2002) report that this could be due to a combination of factors such as the inability of mutual group members to effectively control adverse selection and cost-efficiently monitor policyholders' behavior once insurance has been purchased, and institutional difficulties (e.g., lax property rights legislation) that impede effective contractual enforcement. Therefore, the relative effectiveness of organizational form in the promotion of micro-finance/micro-insurance is not obvious from the literature, and so our case study approach could usefully inform the current debate – at least as it applies to developing economies.

### ***3.3. Microinsurance, Microcredit and Poverty Alleviation***

The importance of insurance in economic growth and development cannot be over-emphasised. Low income individuals and households especially in developing countries face a variety of environmental and lifer

cycle hazards, which if not mitigated could severely impact their welfare. Several studies (e.g. see Murdoch, 1990; Dercon, Kirchberger, Gunning and Platteau, 2008) have shown that the ability of low-income groups to rise out of poverty in the long-term is impeded by the substantial welfare costs incurred in dealing with unexpected risks and shocks. Some of the strategies employed to cope with loss events include selling productive assets, informal credit arrangements, and family and mutual support networks. However, these strategies have been found to be inefficient, insufficient and unreliable especially in the face of covariant shocks which systematically affect members of the same community. Murdoch (1999) in the study of the risk strategies used by the poor of developing countries also noted that informal risk-coping mechanisms only serve as a partial protection for low income groups.

The use of financial instruments such as insurance, flexible savings and credit products; and formal social security systems have been identified as risk-coping strategies which offer better protection for the poor. In particular, micro-insurance could give the poor access to formal insurance services and provide a means of coping with the consequences of severe economic shocks thereby allowing them to take advantage of opportunities that would help escape poverty (Dercon et al., 2008). Furthermore, Leftley and Mapfumo (2006) acknowledged that microinsurance when used with other financial instruments such as credit, savings and other social mechanisms provides an invaluable safety net to the low income groups.

The impact and value derived from the use of micro-insurance by low income households have been well documented in literature (see Dercon et. al, 2008). For example, in their study of the health schemes in Taiwan, Cheng and Chiang (1997) found that universal health insurance removed some of the barriers to healthcare for low income households. Dror, Koren and Steinberg (2006) also report that micro-insurance improves access to hospitalisation and medical consultations for low income households in the Philippines. Furthermore, Hamid, Roberts and Moseley (2010) in their study of micro-health insurance in Bangladesh found that the use of miciro-insurance is positively related to poverty indicators such as household income and food sufficiency. They also obtained a positive relation for health awareness and utilisation.

The majority of previous research on the impact of micro-insurance as a risk-coping strategy for low income households is focused micro-health insurance schemes. This is not surprising as health insurance is the most demanded microinsurance product and its impact can be easily measured (e.g., through hospital utilisation). Some other studies (e.g., Gine, Townsend and Vickery, 2007; Gine and Yang, 2009; Karlan et al., 2011) also evaluate the uptake and impact of agricultural microinsurance. However, very few studies have evaluated the impact of microinsurance on microcredit/lending. Chakrabarty (2012) examined the impact of credit-life insurance bundled with microcredit loans in Bangladesh and found that microcredit when used in conjunction with microinsurance reduces the use of child labour for the extremely poor households. Also, Hintz (2010) in the study of the compulsory credit life insurance offered by the international German insurer - Allianz - through various MFIs found that the use of microinsurance improved financial literacy and helped to repay other debts. Therefore, our research complements these prior studies on micro-insurance and micro-credit and so contributes to the existing development finance literature.

#### **4. Case Study Methodology**

To address our two research questions we used a semi-structured interview protocol, informed by the organizational economics literature, to interpret the data collected from our field cases. A copy of the interview instrument employed is given at Appendix. Baiman (1990) argues that applying theory to a research question or problem helps to coordinate and sharpen the focus of case inquiry. Yin (2004) also suggests that 'purposively' (as opposed to 'statistically') selected case studies such as that adopted here can help researchers to sharpen the focus of their fieldwork efforts on 'representative cases'. In turn, such an approach can enable researchers to better assess the accuracy of the methodology employed and so contribute to theory development and empirical investigation. Eisenhardt (1989), Eisenhardt and Graebner (2007), Doz (2011), and Welch et al., (2011) further contend that case study design can complement and supplement established theory by providing 'grounded' micro-level perspectives. Wright and Copestake (2004) report that such attributes can usefully inform commercial and/or public policy

decisions. We believe that these intrinsic qualities of case study methodology are particularly apt in the present study given the complex and emergent nature of micro-finance and micro-insurance in low income countries such the Gambia. By focusing on case studies in a single country we also to some extent help control for variations in business environment that could confound interpretations of field data obtained from different jurisdictions.

#### **4.1. Fieldwork**

Site visits and field interviews (of approximately two hours) were organized with the assistance of the Gambia Chamber of Commerce and conducted on a face-to-face basis with the Chief Executive Officer (CEO) of each MFI. The three selected MFIs are associate members of the local Chamber of Commerce and the participants volunteered to participate in the interviews and cooperate in the study. Top-tier executives were chosen as the principal informants in our study because we sought strategic as well as operational insights on micro-credit and micro-insurance. The principal informants were thus fully knowledgeable about all aspects of their business processes and financial activities. Given the traditional hierarchical structure of corporate governance and prevalence of dominant lead executives on the boards of African companies (Wanyama, Burton and Helliard, 2009) the views of the CEOs interviewed were taken as being generally reflective of the board as a whole<sup>2</sup>. However, in accordance with local protocol our case study interviews were not tape-recorded.

As in prior micro-finance-based case studies (e.g., Copestake, Bhalotra and Johnson, 2001; Bruton et al., 2009, 2011), the basic strategy for site selection was to purposefully identify and arrange access with representative MFIs of different organizational types that had loan books of sufficient scale to warrant management considering offering micro-insurance to low income borrowers (see Table 3). During the semi-structured interview process, the respondents were also invited to express

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<sup>2</sup> Framing our research design based on this assumption allowed us to get a fairly representative organizational view of micro-finance and micro-insurance from a limited number (albeit in-depth) field interviews. This was advantageous given the time constraints of the study. To some degree it also counters the potential criticism that three interviews in three different MFIs is insufficient to fully ground the research project.

their views on the key success factors for micro-finance and micro-insurance (see Table 5). Phrasing interview questions in such an open-ended manner allowed us to probe deeply the phenomenon under investigation and maximize the amount of information obtained from the interviewees in the field (Patton, 1990). Additionally, as recommended in Yin (2004), the questions were also piloted with senior managers of a major Gambian insurance company prior to the formal interviews being carried out. The questions were then appropriately refined and revised to comply with local protocol and ensure aptness and clarity of the matters to be raised during the interviews. Furthermore, to ensure the validity and reliability of the information gleaned from the interviews, and so mitigate the risk of response bias, the answers recorded for each principal informant were re-confirmed at the end of the interview (e.g., see Patton, 1990). Finally, the qualitative data gathered in the field were subsequently analyzed in an iterative manner and constantly cross-referenced to the theoretical constructs underpinning our research design in order to identify issues that required follow-up and/or clarification (e.g., see Eisenhardt and Graebner, 2007).

#### **4.2. Organizational features**

Table 3 presents the main organizational characteristics of each MFI visited in the field, namely: a Gambian (mutual/cooperative) credit union, a Gambian-owned bank, and a subsidiary of a foreign (Nigerian)-owned bank (that also sells insurance – a so-called ‘bancassurer’).

[Insert Table 3 here]

The MFIs given in Table 3 are relatively large micro-finance operatives that are based in Gambia’s capital city – Banjul. However, the MFIs differ from each other in many key regards such as ownership structure, length of operations in the market, international links, and knowledge/experience of micro-insurance. The credit union has about 32,000 savers/borrowers most of whom are members of one of 58 local savings-borrowing groups which are organized into six regional credit

union associations (referred to locally as 'chapters')<sup>3</sup>. The gender mix of credit union membership is approximately 75% male to 25% female with at least 50% of members being classed as low income earners mainly engaged in the 'informal' (or 'survivalist') economy (i.e., individuals earning less than US\$4 per day)<sup>4</sup>. The Gambian bank had some 150,000 micro-finance customers and is the largest MFI in the Gambia accounting for roughly 25% of micro-savings and micro-lending in the country. The Gambian bank also has a portfolio of more wealthy and financially sophisticated clients that accounted for most of the annual profits of the business. The Nigerian bancassurer was a relatively new entrant in Gambia with roughly 20,000 local clients drawn mainly from more affluent social groups with only a small percentage of its clients being classed as micro-borrowers (again those with an income of less than US\$4 per day). However, this institution was part of a multinational banking group that has longstanding experience of micro-credit and micro-insurance in Nigeria and other parts of West Africa.

## 5. Research Findings

Our first research question asked: What is the most appropriate organizational structure to maximize the economic benefits of micro-insurance? In addressing this question, we evaluate the organizational attributes and procedures that help manage information asymmetry and agency problems associated with micro-lending and micro-insurance decisions. These attributes are summarized in Table 4.

[Insert Table 4 here]

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<sup>3</sup>Borrower groups in the Gambia, and sub-Sahara Africa generally, usually form around a social (e.g., tribal) or sectoral (e.g., agrarian) focal point (Copestake et al., 2001). Ghatak and Guinnane (1999) distinguish between different types of borrower groups – those groups that are formally and jointly liable in the event of non-compliance with individual member's repayment schedules and those (often smaller borrower groups) where loan default by individual members is not jointly liable but rather discouraged by the social obligations and sanctions that group membership imposes on individual borrowers. The chapters in the Gambian credit union are of the latter kind of borrowing group structure. Both forms of borrowing group can help reduce moral hazard effects in micro-financing (e.g., through the use of group monitoring and enforcement mechanisms) and so lower the probability of loan default or the misuse of borrowed funds.

<sup>4</sup> In this study low income earners in the informal economy are defined as individuals who are not formally (contractually) employed (e.g., see Akotey et al., 2011).

## **Question 1: Organization-type**

### **Credit Union**

Consistent with theory (e.g., Smith and Stutzer, 1990, 1995), the interview with the principal credit union informant confirmed that the organizational structure of the credit union has advantages over the banks in the control of information asymmetries and agency problems. For example, the social ties and obligations that come with most micro-borrowers being established savers and members of associated socio-business groups was identified by the interviewee as a major advantage in reducing the potential risks (and costs) of loan delinquency and the likelihood of fraudulent and vexatious claims being made under micro-insurance policies. This view is consistent with the observations of prior studies (e.g., Ghatak and Guinnane, 1999; Bruton et al., 2009, 2011) which highlight that focusing transactions within 'club-like' borrowing groups improves the likelihood that individual borrowers will meet their financial and moral obligations under micro-credit agreements. Bruton et al. (2011) further note that low income earners in developing countries are often self-motivated to collectively form borrowing groups/associations (e.g., through credit unions) so that they can access a cheap source of finance for prospective small-scale business ventures.

The interview at the credit union highlighted additional economic benefits from micro-insurance emanating from the credit union's control over product design and distribution and the reduced need for third party commission payments to be made to brokers/agents. The principal informant reported that improved risk assessment and risk pricing arising from the control of information asymmetries could also provide opportunities for the sale of micro-insurance products other than term-life insurance covering the period of the loan in force. For example, the interviewee stated that:

"... the ability of the cooperative structure of the credit union to control credit risks could help us to offer micro-insurance for other risks such as disability due to health problems or accident for both the primary borrower and his/her dependents. . .".

In their Latin American case studies, Bruton et al. (2011) report that one of the major reasons for the failure of borrowers (particularly women)

to effectively utilize loans to realize new business opportunities was the health risks of dependents rather than themselves. In societies with a limited or non-existent welfare state, the proceeds from micro-loans are often redirected to pay for medical and other 'emergency' expenses rather than invest in originally envisaged new projects. Clearly, the extension of micro-insurance to cover dependents as well as principal borrowers could help improve the entrepreneurial effectiveness and economic impact of micro-finance initiatives. This issue is likely to be important for future local micro-insurance product-market innovation in sub-Saharan Africa (e.g., see also Akotey et al., 2011).

In their study of micro-credit in Zambia, Copestake et al. (2001) found that rigid group enforcement of fixed micro-loan schedules could make some borrowers and/or their dependents worse off if they encountered difficulties in repaying loans due to unforeseen personal mishap such as death or disability. Micro-insurance could help mitigate such loan repayment difficulties for group members facing unanticipated life cycle difficulties. Indeed, the credit union executive stated that:

"... micro-insurance would be particularly welcomed by our group members and chapters [member associations] as it offers risk protection to borrowers and providing surety as to their future borrowing capability in the event of illness or death."

The credit union executive further acknowledged that micro-insurance would enable micro-borrowers to avoid having to pressure other chapter members and/or kin to repay the micro-loan of a particular individual borrower in the event of his/her death or disability. In this way, the principal informant suggested that micro-insurance could play an important function in promoting group solidarity and social protection as well as providing financial indemnity in the event of death or disability even in a Muslim country such as the Gambia<sup>5</sup>. Micro-insurance written on

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<sup>5</sup> Conventional life insurance is often deemed by many Muslims to be inconsistent with Islamic principles – for example, it could be viewed as 'gambling on life' (Abdul Kader et al., 2010). On the other hand, the case study interview at the credit union plus subsequent discussions with members of the Gambian Chamber of Commerce indicated that "loan forgiveness" in the event of death or severe disability of the primary borrower is an integral part of the Islamic faith as it relieves dependents from the moral and financial burden, and spiritual obligation to repay outstanding loans. Hence, micro-insurance could actually be consistent with Islamic principles. MFI respondents recognized this issue as being of potential benefit in marketing micro-insurance products in the Gambia – a secular country but one with a predominantly Muslim population.



a borrower-group (chapter) basis (i.e., with all members covered by a single insurance policy) could also help reduce underwriting costs (adverse selection) and lower premium rates for group members.

Protection against involuntary loan default provided by micro-insurance would also help the credit union reduce its loan loss provisions (currently the major liability item in the credit union's balance sheet) and so promote period profitability, encourage further lending, and enhance its ability to attract new business. Indeed, the principal informant at the credit union felt that prospective improvements in financial condition induced by the indemnity benefits of micro-insurance would allow the credit union to realize synergy gains from lower loan delinquency rates, reduced rates of interest, and higher savings deposits rates. The credit union could also utilize insurance funds to finance expansion of the micro-credit business and allow micro-loans to have more flexible design features (e.g., to cater for income volatility of the borrower). As the interviewee said:

"... micro-insurance could have a significant positive effect on our annual financial performance and strengthen our balance sheet. This would enable us to expand our loan book and increase business volumes thereby enabling us to realize the benefits of economies of scale and increase the range of financial products and services that we offer to our members ...".

What is more, the respondent perceived that new members could be encouraged to join the credit union as the result of micro-insurance mitigating credit and insolvency risks for the organization. These attributes could enable the credit union to grow its business through the realization of economies of scale (increased volumes) and economies of scope (product diversification). Ghatak and Guinnane (1999) suggest that such micro-economic advantages could realize tangible competitive gains for MFIs operating in developing countries. It would also have the advantage of increasing the local market supply of micro-credit and micro-insurance protection for low income groups.

### ***Gambian-owned Bank***

The Gambian-owned bank is an established and prominent local MFI with informal links to financial institutions in Europe (via the Managing

Director's personal business networks). As a stock company, the Gambian bank's loan portfolio is backed by shareholders' equity as well as subordinated debt and accumulated reserves. However, 75% of annual profits come from conventional banking activities with local companies and 'high net worth' private individuals. The organization is larger, more diversified, and financially stronger than the credit union. Surprisingly, both conventional loan and micro-credit-backed term life/disability insurance did not exist to any significant degree at the bank due to a general lack of in-house insurance knowledge plus some doubt amongst senior bank management as to its compatibility with Islamic principles (see footnote 4). However, the prospects of insurance providing collateral for the bank's conventional and micro-finance business were deemed to be very good and important by the senior executive interviewed:

" . . . insurance generally, and micro-insurance in particular, are currently of great interest to the bank as it will help improve profitability, promote solvency, and protect shareholders' interests. These are things that are important not only to us but others such as regulators (like the Central Bank), auditors and the government. We are currently obtaining advice from a major Dutch insurance corporation on the prospects for term micro-life insurance to protect our micro-credit book . . . ".

Despite the potential benefits of greater financial strength, a diversified business portfolio, and a well-established local market presence, the principal informant at the Gambian bank noted potential operational difficulties in addition to lack of knowledge/expertise on micro-insurance. For example, loan default risk was a major issue on the micro-credit side of the business suggesting potentially acute problems of adverse selection and moral hazard. The usual absence of loan collateral in micro-finance arrangements thus means that the ability of the local bank to indemnify itself against the risk of severe default losses is virtually non-existent without micro-insurance. Indeed, the bank executive interviewed acknowledged that:

" . . . it is difficult to identify the creditworthiness of customers – particularly new customers – given that economic circumstances [in the Gambia] have changed recently following the global financial crisis . . . This has hindered our lending expansion plans in a big way ."

This respondent further suggested that unlike their counterparts in developed Western economies, locally-owned banks in sub-Saharan Africa are in practice not efficiently diversified. Additionally, compared with the credit union, information asymmetry problems at the local bank are potentially more acute because the bank focuses its lending activities on individuals with limited and/or uncertain credit history rather than through self-monitored and mutually-dependent borrower groups (e.g., see Ghatak and Guinnane, 1999). Furthermore, the inherently weaker structural controls of information asymmetry and agency problems inherent in stock forms of organization (such as the Gambian bank) are potentially major inhibitors on the effectiveness of micro-insurance in reducing the risk of debt default and associated agency costs. Additionally, selling micro-insurance to disparate individuals either directly or through third party agents/brokers, is likely to be less cost-efficient/effective than directly distributing micro-insurance through the mutual group structure of the credit union (Loewe, 2006). This limitation is expected to further increase the costs of micro-insurance for the Gambian bank compared with its local credit union competitor.

### ***Foreign-owned Bancassurer***

The key economic advantage of the foreign (Nigerian) bancassurer MFI is that it is part of a larger organization that has business experience of managing micro-risk transfer pools in other West African markets. This knowledge and experience can encourage product-market innovation and enable technology (e.g., actuarial) to be used in the risk assessment and pricing of micro-finance and micro-insurance arrangements (e.g., see Loewe, 2006; Churchill, 2007). On the other hand, the foreign-owned bancassurer has major economic disadvantages compared with its local credit union and bank rivals. Despite the advantage of in-corporate risk management knowledge and expertise, information asymmetry and agency problems are likely to be severe due to the foreign bancassurer's relative lack of local market knowledge. The interviewee at the bancassurer acknowledged that:

“. . . getting to know the nature and opportunities of the local Gambian market – the social nuances and cultural aspects – is a

major challenge that will require considerable investment in market research . . .”.

Copestake et al. (2001, p. 92) also recognize the importance of market research for MFIs and the expediency of “. . . highlighting the need for innovation based on systematic product development rather than uncritical replication of models developed in other contexts.” In addition, Loewe (2006) contends that commercial entities, such as the subsidiaries of foreign-owned banks, are often too distant in socio-cultural and spatial terms from targeted micro-insurance customers. This limitation can hinder customer confidence and inhibit the demand for micro-insurance amongst low income earners. Such structural organizational deficiencies with this foreign-owned MFI clearly exacerbate the information asymmetry and agency problems that it faces in the Gambian micro-credit and micro-insurance markets. The limited local networks held by the foreign-owned bank further means that insurance brokers/agents will have to be employed to distribute and sell micro-insurance products thereby adding to operating costs.

### ***Evaluation***

Our case study evidence suggests that the credit union-type structure is likely to be the most appropriate (i.e., economical, efficient and effective) distribution and servicing platform for micro-insurance in sub-Saharan countries such as the Gambia. Whilst credit unions could use the collateral qualities of micro-insurance to improve their annual profitability (e.g., by lowering loan loss provisions and increasing volumes of micro-loans) they would nonetheless warrant partnering with an insurance company or some other financial institution to provide a sufficient level of financial scale, risk diversification, as well as the requisite degree of product-market knowledge, managerial expertise and infra-structural support (e.g., with regard to actuarial technology). In particular, the importance of scale and risk diversification efficiency in complementing organizational form in promoting the micro-insurance aspects of micro-finance arrangements appears to be a key issue in less-developed countries such as the Gambia. However, this aspect has not been given sufficient emphasis in the international business literature. Based on the above findings we therefore propose:

Proposition 1: The financial success of micro-insurance in providing collateral for micro-credit will be conjointly driven by the mutual/cooperative form of organization, firm size and the ability to efficiently diversify assumed risks.

In addition, the importance of local knowledge and established trust relationships irrespective of the scale and structure of the organization was stressed in our case findings. Whist recognized in prior research (e.g., Giesbart et al., 2011), this observation nevertheless reinforces the importance of local customer management as well as product-market knowledge in promoting micro-credit and micro-insurance in less-developed countries. Therefore:

Proposition 2: The financial success of micro-insurance in providing collateral for micro-credit will be driven by customer as well as product-market knowledge.

These two propositions (together with propositions 3 and 4 later on) and their linked with micro-credit and micro-insurance outcomes are summarized in a schematic fashion in the figure below.

[Insert Figure here]

## ***Question 2: Wider Socio-Economic Benefits***

[Insert Table 5 here]

Table 5 presents the views of the case informants as to the important features of micro-finance and micro-insurance products that help to attract consumer demand and promote long-term economic development. Consistent with prior international development studies (e.g., Loewe, 2006), in all cases the principal informants emphasized the need for simple product design and effective distribution with sustained profitability – particularly in MFIs with joint-stock ownership where annual returns in excess of the cost of capital are necessary to satisfy shareholders. It was generally recognized by the respondents interviewed that sustained profitability in the micro-finance/micro-insurance sector was conditional upon achieving large volumes of business (economies of scale) and opportunities for cross-selling (economies of scope). As noted in prior

studies conducted in sub-Saharan Africa (e.g., Copestake et al., 2001; Giesbart et al., 2011), these requirements would require an appropriate level of product innovation based on extensive local market research. The lack of in-house product-market and technical (e.g., actuarial) knowledge was deemed by all the interviewees to be a potentially important impediment to successful commercial performance in the local micro-finance/micro-insurance sector. Indeed, a major issue raised by the interviewees with regard to the profitability of micro-finance/micro-insurance schemes was estimating and pricing the financial (default) risk and insurable risk of loss. This includes effectively assessing and managing adverse selection and moral hazard problems (including the risk of fraud). However, these potential limitations could be alleviated by accessing overseas knowledge and expertise of micro-insurance either from head office or in partnership with an informed local or international financial institution.

The case study evidence also highlighted the relatively more severe problems of accurately estimating the future profitability of financing arrangements amongst communities in rural compared with urban areas due to increased problems of risk assessment, monitoring and control across geographical spaces. This observation is consistent with the findings of recent studies conducted elsewhere in West Africa (e.g., the Ghana-based study of Akotey et al. 2011). It further suggests that sustained profitability of micro-finance and micro-insurance schemes in developing countries such as Gambia could be influenced by distributional aspects such as a focus on rural versus urban location and/or tribal group/community. For example in the Gambia, rural village communities tend to be characterized by homogeneous tribal and kinship groups whereas the urban areas tend to be more ethnically mixed and diverse in terms of educational standards and income levels.

The geography of micro-credit and micro-insurance product distribution is also linked closely with other socio-cultural attributes such as gender and religious affiliation. For instance, in rural parts of the Gambia many micro-borrowers are women who borrow to either establish small ventures (e.g., a market stall) and/or cooperatives (e.g., with a focus on crafts or agricultural products). All principal informants noted the relatively lower mortality risk for females of given age cohorts compared

with their male counterparts<sup>6</sup>. The principal informant from the credit union also indicated that females tended to have lower rates of loan default than males. This observation has been identified in prior research (e.g., Bruton et al., 2011) and raises the possibility that the profitability of micro-insurance could be gender-related as well as location driven<sup>7</sup>. Interestingly, the case study evidence gleaned from the credit union case study suggested the strong Islamic influence, particularly in more conservative rural areas could actually enhance the prospects of selling micro-insurance on the back of micro-loans as it relieves dependents of the financial burden in the event of the untimely death of the principal borrower (see also footnote 4). This finding tends to contradict some prior studies (e.g., Abdul Kader et al., 2010) and indeed, the pre-conceptions of the principal informant at the Gambian bank, that life insurance products are less attractive in Islamic communities because of their commonly perceived inconsistency with religious belief.

## ***Evaluation***

In terms of the prospective wider socio-economic benefits of micro-insurance for micro-lending, scale and local product-market knowledge were again found to be important considerations in our case studies. However, geographical and associated socio-cultural aspects (e.g., gender) also appear to be important in the micro-credit and micro-insurance business in the Gambia. Consequently, we propose:

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<sup>6</sup> Table 1 (footnote 4) gives the average female to male life expectancy in the Gambia to be around 58 years compared with 54 years. However, this rate will vary between urban and rural communities with urban life expectancy being higher due to conditions such as the relatively better social infrastructure and higher per capita incomes in towns and cities.

<sup>7</sup> At the time of the interview the reason(s) for the perceived better micro-loan performance rate for females compared with males was not immediately obvious to the principal informant at the credit union. However, it is possible that because women tend to have fewer economic opportunities than men in less-developed (particularly Islamic) countries they compensate for this with a greater determination for their business initiatives to succeed and thus enable them to continue loan repayments. It is also possible that socio-cultural factors in sub-Saharan African countries, such as the stigma associated with loan default and the public reputational implications that this could have for other family members (especially dependent children), could be given more psychological weight by women compared with men. We agree with Bruton et al. (2011, p. 17) who consider that gender differences in micro-loan performance warrants further theoretical and empirical research by international business scholars.

Proposition 3: The wider socio-economic benefits of micro-insurance in promoting micro-credit will be influenced by geographical distribution and gender considerations.

Additionally, contrary to orthodox views expressed in some prior research (e.g., Abdul Kader et al., 2010) the Islamic faith may actually promote rather than impede the growth of micro-insurance in backing micro-loans, at least in secular Muslim societies such as the Gambia. Therefore, we propose that:

Proposition 4: The wider socio-economic benefits of micro-insurance in promoting micro-credit will be driven, and not impeded by, the principals of Islamic faith.

## **6. Conclusions**

Drawing a framework from the organizational economics literature and utilizing case study methodology this study examines the role of micro-insurance in supporting micro-finance initiatives in the Gambia. The Gambia reflects many of the salient institutional attributes of low income countries in sub-Sahara Africa and as such, the results of our study can be generalized to other developing countries in Africa and elsewhere.

In terms of our first research question, a key finding that emerges from our research is that whilst stock-owned banks are able to efficiently diversify the high risks of micro-credit across shareholders' funds as well as subordinated debt and accumulated reserves, and draw on risk management expertise they are relatively more inhibited by information asymmetry and agency problems than mutual-cooperative-type organizations such as credit unions. In the local credit union, adverse selection is controlled by fixed pre-specified savings requirements and precautionary managerial assessment of prospective borrowers' creditworthiness and financial reliability. The social ties, obligations, and sanctions within borrower groups (chapters) associated with the credit union further help to minimize moral hazard even in cases of involuntary default. These are important advantages in the provision and distribution of micro-finance and micro-insurance in highly asymmetric markets such as those in less-developed countries. Hence, in addressing our first research question we argue that the credit union is likely to be the most appropriate organization for profitable and effective micro-finance and



micro-insurance initiatives in developing countries such as the Gambia. However, a new theoretical and empirical slant arising from our research is that the mutual/cooperative form of organization will also need to have sufficient size (scale) and diversity to efficiently manage risks and realize sustainable profits. Additionally, important is the requirement for MFIs (and their business partners) to be aware of local customer needs as well as product-market knowledge in order to effectively assess and price risk, and develop appropriately flexible and innovative micro-credit and micro-insurance products.

In relation to our second research question, it is evident from our case study research that by offering collateral for micro-credit and providing indemnity cover in the event of some severe loss event such as death or disability to the primary borrower micro-insurance is clearly a potentially important mechanism for promoting entrepreneurial development and sustained economic growth in less-developed countries. Therefore, the results of our study could have important commercial and public policy implications. For example, by mitigating risk and uncertainty in emergent markets, micro-insurance is a potential market-based solution to social and economic hardship that can promote self-help initiatives thereby reducing reliance on government support and international aid. This is particularly pertinent in developing countries of sub-Saharan Africa (such as the Gambia) that have a limited welfare state and no public sector subsidized micro-insurance capacity. Geographical, gender and other socio-cultural (e.g., religious) issues are also likely to be important considerations in terms of the future role of micro-insurance in the development of the wider market for micro-finance in sub-Saharan Africa.

We acknowledge that our research is subject to inherent limitations such as the focus on three interviews in three different types of MFI organization while excluding other structural forms of organization such as government-owned/sponsored organizations. Nonetheless, the organizational characteristics of the three cases examined in the present study are representative of most MFIs in developing countries. Given the prevalent hierarchical nature of corporate systems in sub-Saharan Africa the views of the interviewees are also deemed to reflect those of other board members. Nonetheless, we acknowledge that the conclusions from

our research may need to be tempered in line with these inherent limitations with the research approach adopted. Finally, we consider that the role of micro-insurance in facilitating micro-finance and promoting sustainable economic growth in developing countries could benefit from more empirical research. For example, future international business research could investigate the determinants of the profitability of micro-insurance schemes, the macro-economic multiplier effects of micro-insurance in less-developed countries, and the impact of micro-insurance on the performance of micro-loans at the country, firm, and person-specific (e.g., gender) levels of analysis.

## References

- Abdul Kader, H.A., Adams, M.B. and Hardwick, P. (2010), The Cost Efficiency of Takaful Insurance Companies, *Geneva Papers on Risk and Insurance: Issues and Practice* Vol. 35, No. 1, pp. 161-181.
- Akotey, O.J., Osei, K.A., and Gemegah, A. (2011), The Demand for Micro Insurance in Ghana, *Journal of Risk Finance*, 12(3), pp. 182-194.
- Arrow, J.K (1963), Uncertainty and the Welfare Economics of Medical care, *American Economic Review*, Vol.53, No.5, pp.941-973.
- Baiman, S. (1990), Agency Research in Managerial Accounting: A Second Look, *Accounting, Organizations and Society*, Vol. 15, No. 4, pp. 341-371.
- Bruton, G.D., Ahlstrom, D., and Puky, T. (2009), Institutional Differences and the Development of Entrepreneurial Ventures: A Comparison of the Venture Capital Industries in Latin America and Asia, *Journal of International Business Studies*, Vol. 40, No. 5, pp. 762-778.
- Bruton, G.D., Khavul, S. and Chavez, H. (2011), Micro Lending in Emerging Economies: Building a New Line of Inquiry from the Ground Up, *Journal of International Business Studies* Vol. 42 , No. 5, pp.718-739.
- Chankova, S., Sulzbach, S., and Diop, F. (2008) Impact of Mutual Health Organisations: Evidence from West Africa. *Health Policy and Planning*, Vol.23, No.4, pp. 264-276.
- Chakarbarty, S. (2012), Does Micro-credit Increase bonded Child Labour in the absence of Microinsurance? Microinsurance Research Paper No.12. International Labor Organization, Microinsurance Innovation Facility, Geneva.
- Cheng, S.H and Chiang, T.L. (1997), The Effect of Universal Health Insurance on Healthcare utilization In Taiwan: Results from a National Experiment. *Journal of American Medical Association*, Vol.278, pp.89-93
- Churchill, C. (2007), Insuring the Low-Income Market: Challenges and Solutions for Commercial Insurers, *Geneva Papers on Risk and Insurance: Issues and Practice*, Vol. 32, No. 3, pp. 401-412.
- Churchill, C., Phillips, R.D., and Reinhard, D. (2011), Introduction to the 2011 Symposium Issue of JRI on Microinsurance, *Journal of Risk and Insurance*, Vol. 78, No. 1, pp. 1-5.
- Copestake, J., Bhalotra, S. and Johnson, S. (2001), Assessing the Impact of Microcredit: A Zambian Case Study, *Journal of Development Studies*, Vol. 37, No. 4, pp. 81-100.
- Criel, B., Stuyft, P. and Lerberghe, W. (1999), The Bwamanda Hospital Insurance Scheme: Effective for Whom? A Study of its impact on Hospital Utilization Patterns, *Social Science and Medicine*, Vol.48, No.7, pp. 897-911.

Dercon, S., Kirchberger, M., Gunning, J.W. and Platteau, J. (2008), *Literature Review on Microinsurance*, Microinsurance Paper No. 1. International Labor Organization. Microinsurance Innovation Facility, Geneva.

Diagne, A. and Zeller, M. (2001), *Access to Credit and its Impact on Welfare in Malawi*, Research Report 116, International Food Policy Research Institute, Washington, DC.

Doz, Y. (2011), Qualitative Research for International Business, *Journal of International Business Studies*, Vol. 42, No. 5, pp. 582-590.

Dror, D.M., Koren, R. and Steinberg, D.M (2006), The Impact of Filipino Micro-Health Insurance Units on Income-Related Equality of Access to Healthcare. *Health Policy*, Vol.77, No.3, pp.304-317

Easterly, W. (2009), Can the West Save Africa? *Journal of Economic Literature*, Vol. 47, No. 2, pp. 373-344.

Easterly, W. and Levine, R. (1997), Africa's Growth Tragedy: Policies and Ethnic Divisions, *Quarterly Journal of Economics*, Vol. 112, No. 4, pp. 1203-1250.

Eisenhardt, K.M. (1989), Building Theories from Case Study Research, *Academy of Management Review*, Vol. 14, No. 4, pp. 532-550.

Eisenhardt, K.M. and Graebner, M.E. (2007), Theory Building from Cases: Opportunities and Challenges, *Academy of Management Journal*, vol. 50, No. 1, pp. 25-32.

Giesbart, L., Steiner, S. and Bendig, M. (2011), Participation in Micro Life Insurance and the Use of Other Financial Services in Ghana, *Journal of Risk and Insurance*, Vol. 78, No. 1, pp. 7-35.

Gine, X., Townsend. R.M and Vickery, J. (2007), Statistical Analysis of Rainfall Insurance Payouts in Southern India, *American Journal of Agricultural Economics*, Vol.89, No.1, pp.1248-1254.

Gine, X., and Yang, D. (2009), Insurance, Credit and Technology Adoption: Field Experimental Evidence from Malawi, *Journal of Development Economics*, Vol.89, No.1, pp.1-11.

Ghatak, M. and Guinnane, T.W. (1999), The Economics of Lending with Joint Liability: Theory and Practice, *Journal of Development Economics*, Vol. 60, No. 1, pp. 195-228.

Hamid, S.A., Roberts, J., and Mosley, P. (2011), Can Micro Health Insurance Reduce Poverty? Evidence from Bangladesh *Journal of Risk and Insurance*, Vol. 78, No. 1, pp. 57-82.

Hintz (2010). Social Impact Assessment of Compulsory Credit-Life Insurance, in Morelli, E., Onnis, G.A., Ammann, W.J. and Stutter, C. (Eds). *Microinsurance: An Innovative tool for Risk and Disaster Management*, Global Risk Forum Davos, Switzerland.

International Monetary Fund (2010), *International Financial Statistics (December)*, IMF, Washington, DC, USA.

Islam, A. and Maitra, P. (2011), Health Shocks and Consumption Smoothing in Rural Households: Does Microcredit have a Role to Play? *Journal of Development Economics*, forthcoming.

Karlan, D. Kutsoati, E., McMillan, M., and Urdy, C. (2011), Crop Price Indemnified loans for Farmers: A Pilot Experiment in Rural Ghana, *Journal of Risk and Insurance*, Vol.78, No.1, pp.37-55.

Lauz, C. and Muermann, A. (2010), Financing Risk Transfer under Governance Problems: Mutual versus Stock Insurers, *Journal of Financial Intermediation*, Vol. 19, No. 3, pp. 308-322.

Leftley, R., and Mapfumo, S. (2006), *Effective Microinsurance Programs to Reduce Vulnerability*, Opportunity International Network, Oxford.

Loewe, M. (2006), Downscaling, Upgrading or Linking? Ways to Realize Micro-Insurance, *International Social Security Review*, Vol. 59, No. 2, pp. 37-59.

Mayers, D. and Smith, C.W. (1981), Contractual Provisions, Organizational Structure and Conflict Control in Insurance Markets, *Journal of Business*, Vol. 54, No. 3, pp. 407-434.

Mayers, D. and Smith, C.W. (1988), Ownership Structure Across Lines of Property-Casualty Insurance, *Journal of Law and Economics*, Vol. 31, No. 2, pp. 351-378.

McPherson, M. (1996), Growth of Micro and Small Enterprises in Southern Africa, *Journal of Development Economics*, Vol, 48, No. 2, pp. 253-277.

Mosley, P. (2003), Micro-insurance: Scope, Design and Assessment of Wider Impacts, *IDS Bulletin*, Vol. 34, No. 4, pp. 143-155.

Murdoch, J. (1999), Between the State and the Market. Can Informal Insurance Patch the Safety Net? *World Bank Research Observer*, Vol.14, No.2 pp.187-207.

Murgai, R., Winters, P., Sadoulet, and de Janvry, A. (2002), Localized and Incomplete Mutual Insurance, *Journal of Development Economics*, Vol. 76, No. 2, pp. 245-274.

Organization for Economic Cooperation and Development (2009), *Direct Investment Database*, OECD, Paris.

Paal, B. and Wiseman, T. (2011), Group Insurance and Lending with Endogenous Social Collateral, *Journal of Development Economics*, Vol. 94, No. 1, pp. 30-40.

Patton, M.Q. (1990), *Qualitative Evaluation and Research Methods*, Sage Publications, New York.

Platteau, J-P. (1997), Mutual Insurance as an Elusive Concept in Traditional Rural Communities, *Journal of Development Studies*, Vo. 33, No. 6, pp. 764-796.

Roth, J., McCord, M.J. and Liber, D. (2007), *The Landscape of Microinsurance in the World's 100 Poorest Countries*, Microinsurance Centre, Appleton, WI, USA.

Rothschild, M.J. and Stiglitz, J. (1976), Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information, *Quarterly Journal of Economics*, Vol. 90, No. 4, pp. 629-649.

Smith, B.D. and Stutzer, M.J. (1990), Adverse Selection, Aggregate Uncertainty, and the Role of Mutual Insurance Contracts, *Journal of Business*, Vol. 63, No. 4, pp. 493-510.

Smith, B.D. and Stutzer, M.J. (1995), A Theory of Mutual Formation and Moral Hazard with Evidence from the History of the Insurance Industry, *Review of Financial Studies*, Vol. 8, No.4, pp. 545-577.

Swiss Re (2010), Microinsurance–Risk Protection for 4 Billion People, Sigma No. 6, Swiss Re, Zurich, Switzerland.

Townsend, R. (1994), Risk and Insurance in Village India, *Econometrica*, Vol. 62, No. 3, pp. 539-592.

Udry, C. (1994), Risk and Insurance in a Rural Credit Market: An Empirical Investigation in Northern Nigeria, *Review of Economic Studies*, Vol. 61, No. 3, pp. 495-526.

Wanyama, S., Burton, B. and Helliard, C. (2009), Frameworks Underpinning Corporate Governance: Evidence on Ugandan Perspectives, *Corporate Governance: An International Review*, Vol. 17, No. 2, pp. 159-175.

Welch, C., Piekkari, R., Plakoyiannaki, E. and Paavilainen-Mäntymäki, E. (2011), Theorising from Case Studies: Towards a Pluralist Future for International Business Research, *Journal of International Business Studies*, Vol. 42, No. 5, pp. 740-762.

World Bank (2010), *African Development Indicators*, World Bank, Washington, DC, USA.

Wright, K. and Copestake, J. (2004), Impact Assessment of Microfinance Using Qualitative Data: Communicating between Social Scientists and Practitioners using the QUIP, *Journal of International Development*, Vol. 16, No. 3, pp. 355-367.

Yin, R. (2004), *Case Study Research: Design and Methods*, Sage Publications, Thousand Oaks, CA.

## **Appendix: Micro-Credit and Micro-Insurance in the Gambia**

### **Field Interview Instrument**

#### I. Basic Details:

Organization: .....  
Form: .....  
Nationality of ownership: .....  
Interviewee: .....  
Position: .....  
Date interviewed: .....

#### II. Opening questions:

- What does your job entail?
- Explain what you understand to be micro-credit and micro-insurance?
- Does your organization sell/distribute micro-credit and micro-insurance products?
- If so, please give details of:
  - annual value of loans
  - annual value of premiums
  - number and type of loans
  - number and type of policies
- When did first sell micro-credit and micro-insurance products?
- What do you think are your organization's unique selling proposition in micro-credit and micro-insurance?
- What difficulties do you feel exist in selling micro-credit and micro-insurance products?

#### III. Influences on Micro-Lending and Micro-Insurance:

- What are the important product-market considerations for micro-credit and micro-insurance in terms of:
  - Design
  - Risk Assessment
  - Distribution
  - Repayment
  - Purpose
  - Administrative support
  - Governance and control
  - Profitability
  - Market opportunities/trends
- How do you feel the following aspects of micro-credit and micro-insurance are low, medium or high risk to your organization:
  - Seeking new business? Reason?
  - Risk screening? Reason?

- Risk assessment? Reason?
  - Risk pricing? Reason
  - Contract servicing? Reason
  - Contract monitoring? Reason
  - Contract enforcement? Reason
  - Financial default? Reason?
  - Audit and (fraud) control? Reason?
- Do you believe that micro-insurance is/will usefully complement your micro-credit business?
    - If Yes, please explain
    - If No, please explain
  - What do you consider to be the main issues that will: (a) encourage the growth of micro-credit and micro-insurance; and (b) impede the growth of micro-credit and micro-insurance? Please give reasons.
  - Are there any other points regarding the prospects for micro-credit and micro-insurance in Gambia and sub-Saharan Africa that you would like to raise? Please give reasons.



**Table 1: Gambia and Selected Sub-Saharan African Countries – Key Economic Indicators (2009/10)**

This table presents some key economic indicators for the Gambia and three major Sub-Saharan African countries namely Ghana, Nigeria and the Republic of South Africa (RSA) for 2009/10. To facilitate comparison, indicator details are also provided for Sub Saharan Africa as a whole.

COUNTRY					
Indicator	Gambia	Ghana	Nigeria	RSA	Sub-Saharan Africa (excluding RSA)
Population (millions)	1.72	23.84	154.73	50.11	800
Gross Domestic Product (GDP)- (US\$ million)	733	26,169	173,430	285,366	946,095
GDP/Capita(US\$)	426	1,098	1,121	5,695	1,183
Average Annual Inflation rate <sup>1</sup> (%)	5	9	11	4	11
Average Annual Interest rate <sup>2</sup> (%)	27	13.5	7.5	5.5	11
Current Balance of payments. Account deficit (-)/ Surplus (+) (US\$ million)	-120	-757	+1360	-9,900	+1,043
Current Balance of payment as % of GDP- (%)	-16	-3	+1	-4	+10
External Debt (US\$ million)	36.19	180	1,188	5263	18,779
External debt as % of GDP- (%)	5	1	1	2	2
Percent of population on < US\$ 2 per day (extreme poverty) (%)	34	11	64	8	51
Percent of population on < US\$ 4 per day (low income) (%)	61	22	83	26	73
Gini coefficient <sup>3</sup>	0.47	0.43	0.43	0.58	0.52
Life expectancy (males and females)- (years) <sup>4</sup>	56	57	48	51	52

Notes: <sup>1</sup> Inflation is measured as the average annual change in the Consumer Price Index (CPI) in 2009/10.

<sup>2</sup> Interest rate is defined as the average annual commercial bank lending rate in 2009/10.

<sup>3</sup> The Gini coefficient (index) is a measure of income disparity. The closer the gini coefficient is to 1, the greater the variation between the rich and poor.

<sup>4</sup> On average female life expectancy in the sub-Sahara African countries listed in this table is about 4 years more than for their male counterparts.

In the Gambia female life expectancy currently averages around 58 years and 54 years for males.

Sources: World Bank (2010); Organization for Economic Cooperation and Development (2009); International Monetary Fund (2010).

**Table 2: Gambia's Financial Services Sector 2009/10**

This table outlines the main features of Gambia's financial services sector.

	Number	Current key Regulation	Minimum capital requirement	Concentrated Market
<b>Commercial Banks</b>	11 <sup>1</sup>	Gambia Financial Institutions Act (2003); Central Bank Act (2006)	D 300,000 – D60 million (US\$ 11,000 – US\$ 2.22 million)	Yes
<b>Insurance companies</b>	12 <sup>2</sup>	Gambia Insurance Act (2003)	D 15 million (US\$ 55,600)	No
<b>MFIs:</b>		Gambia Central Bank Act (2006)	D 3000 – 1 million (US\$ 11,000 – 37,000) <sup>5</sup>	Yes
<b>Rural :</b>	75 <sup>3</sup>			
<b>Urban:</b>	5 <sup>4</sup>			
	80			
<b>MFI financial statistics:</b>				
<b>Average size of micro- loan per borrower</b>		US\$ 35 per borrower		
<b>Total value of micro- loans outstanding</b>		US\$ 8 million approx.		
<b>Average size of micro- savings per saver</b>		US\$ 70 per saver		
<b>Total value of micro –savings</b>		US\$ 6million approx.		
<b>Average loan length</b>		2-3 years		
<b>Typical loan use</b>		Mainly business venture but some personal loans (e.g. for medical or educational expenses) permitted		
<b>Savings-Loan ratio</b>		2 : 1 approx (low savings mobilization)		

Notes: 1. Includes four (4) foreign owned and one (1) Islamic bank. The three main domestic-owned banks account for 85% of local loans and 95% of local deposits. Most branches are based in the capital-Banjul.

- Includes one pure life insurer and one Islamic (takaful) insurer. Remainder write exclusively or mainly (90% of annual written premiums), non- life insurance business (the majority of which is in property and motor vehicle Insurance). Most insurers are small (i.e. annual new premiums < US\$ 2million) and are 100% domestically -owned. All insurers are joint - stock-owned companies.
- Rural MFIs mainly comprise small savings and credit associations (SACAs) (i.e., forms of cooperative structures) which have ≤ 50 members based in a defined geographical location (e.g. a village). Under Central Bank rules SACAs should not issue loans when liquid assets fall below 15% of loan liabilities. Typically loans for SACAs are on average of low monetary value ( ≤ US\$ 50).
- The largest 5 MFIs account for 90% of micro loans and 75% of micro savings by value. Roughly 70% of the value of micro- credit and 60% of micro savings are accounted for by the two largest MFIs – Reliance (a bank affiliate established in 2006) and the Gambia Women's Finance Association (GAWFA) established in 1987. These two MFIs operate in both urban and rural locations and have an average loan per borrower of US\$ 75 to US\$120 more than twice the average value of loan to borrower ratio of Gambia MFIs a whole.
- Minimum capital requirements for SACAs = D300 (US\$ 111) rising to D300,000 (US\$ 11,111) after 3 years; National credit unions = D 1,000,000 (US\$ 370,400) and MFI subsidiaries of fiduciary financial institutions (FFIs) (e.g., commercial banks) = D 60million (US\$ 2.22million). Capital adequacy levels for all Gambian financial institutions have been raised substantially following the 2008 global economic crisis.

Source: Research Data

**Table 3: Organizational Cases Studied**

This table presents the key organizational characteristics of the three Gambia-based MFIs investigated during the study.

	<b>MFI</b>		
	<b>Gambian Credit Union</b>	<b>Gambian Bank</b>	<b>Nigerian Insurer</b>
<b>Corporate Status</b>	Main Company	Main Company	Subsidiary
<b>Ownership</b>	Mutual	Locally owned-multiple shareholders	100% owned by Nigerian parent
<b>Annual turnover</b>	US\$ 6-10m	US\$ 10-20m	US\$ 0-5m
<b>Local market size</b>	Medium	Large- medium	Small
<b>Length of operations</b>	Established	Established	New Entrant
<b>Current Business</b>	Savings & loans	Savings ,loans & Investments	Savings, loans ,Investments & Insurance
<b>Micro-Insurance</b>	Not- yet	Not-yet	Not yet- but group engaged in micro-insurance in Nigeria.
<b>Micro-insurance Partner</b>	Not yet	Discussions ongoing with Dutch insurer (AEGON)	Yes- group companies
<b>Strengths</b>	<ul style="list-style-type: none"> <li>- Established and growing micro-credit client base.</li> <li>- Good credit vetting systems.</li> <li>- Low loan default rates.</li> </ul>	<ul style="list-style-type: none"> <li>- Established local brand.</li> <li>- Diversified portfolio of business.</li> <li>- Professional finance staff.</li> <li>- International links.</li> </ul>	<ul style="list-style-type: none"> <li>-Can draw on expertise (e.g., actuarial) from parent company.</li> <li>- Experience of micro-credit &amp; micro-insurance in Nigeria.</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>- Lack of micro-insurance expertise.</li> <li>- Lacks large scale</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of micro-insurance expertise.</li> <li>- Experienced bad loans recently.</li> </ul>	<ul style="list-style-type: none"> <li>- Lacks local knowledge.</li> <li>- Yet to build up local clientele.</li> </ul>

*Source: Research Data*

**Table 4: Organizational Attributes for Micro-lending and Micro-insurance.**

This table presents the attributes of the three MFIs in resolving the information asymmetry problems and transaction costs of micro-lending and micro- insurance.

	<b>MFI</b>		
	<b>Gambian Credit Union</b>	<b>Gambian Bank</b>	<b>Nigerian Bancassurer</b>
<b>Organizational Form</b>	Local mutual	Local stock Company	Overseas-owned subsidiary
<b>Agency costs</b>	Potentially Low e.g. <ul style="list-style-type: none"> <li>• Precautionary mgt.</li> <li>• Borrowers are also savers.</li> <li>• Relatively small medium scale</li> </ul>	Potentially Medium –high e.g. <ul style="list-style-type: none"> <li>• Interests of borrowers and savers at risk from managers/shareholders short-termism (no market for corporate control).</li> <li>• Existing non-micro clients at risk if micro-loans ‘go bad’.</li> </ul>	Potentially High e.g. <ul style="list-style-type: none"> <li>• Lack of local knowledge increases agency costs of debt.</li> <li>• Shareholders’ interests (in Nigeria) substantially divergent from local borrower/saver interests.</li> </ul>
<b>Transaction costs</b>	Potentially Low e.g. <ul style="list-style-type: none"> <li>• Comparative advantage in micro- credit (core business)</li> <li>• Local knowledge.</li> <li>• Simple business model.</li> </ul>	Potentially High. e.g. <ul style="list-style-type: none"> <li>• Will need to invest in micro-credit rating systems.</li> <li>• Increased risk may increase costs of micro-loans.</li> </ul>	Potentially High e.g. <ul style="list-style-type: none"> <li>• Need to invest in distribution and promotion (search costs high).</li> <li>• Need to tailor products to local needs and requirements.</li> </ul>
<b>Adverse selection</b>	Potentially Low e.g. <ul style="list-style-type: none"> <li>• Prospective members vetted.</li> <li>• Members must save for &gt; 1 yr before borrowing.</li> <li>• Most members from local groups/associations.</li> <li>• Credit union will control distribution.</li> </ul>	Potentially High e.g. <ul style="list-style-type: none"> <li>• Credit vetting (screening) at individual level.</li> <li>• Rush to gain market share may increase lending risk.</li> <li>• Mode of distribution unclear (may need local agents.)</li> </ul>	Potentially High e.g. <ul style="list-style-type: none"> <li>• Credit vetting (screening) mainly at individual level.</li> <li>• Rush to gain market share may increase lending risk.</li> <li>• Mode of distribution unclear (may need local agents.)</li> </ul>

<b>Moral Hazard</b>	Potentially Low e.g. <ul style="list-style-type: none"> <li>Trust relationships will reduce the risk of fraud.</li> </ul>	Potentially Medium –High e.g. <ul style="list-style-type: none"> <li>Will need to monitor loan use.</li> <li>Will need to monitor cost effectiveness of distribution.</li> </ul>	Potentially Medium –High e.g. <ul style="list-style-type: none"> <li>Will need to monitor loan use.</li> <li>Will need to monitor cost effectiveness of distribution.</li> </ul>
<b>Benefits of Micro-Insurance</b>	Potentially Significant e.g. <ul style="list-style-type: none"> <li>Can reduce the need for loan loss provisions and so boost period earnings.</li> <li>Increase savings rates and reduce borrowing rates.</li> <li>Help increase lending capacity.</li> </ul>	Potentially Significant e.g. <ul style="list-style-type: none"> <li>Can reduce loan loss provisions and so increase earnings (and managerial bonuses).</li> <li>Risk of failure to repay loan passed to insurer.</li> </ul>	Potentially Significant e.g. <ul style="list-style-type: none"> <li>Can complement existing micro-insurance portfolios in Nigeria.</li> <li>Can reduce loan loss provisions and so increase earnings (and managerial bonuses).</li> </ul>
<b>Key issues</b>	<ul style="list-style-type: none"> <li>Lack of insurance expertise and actuarial systems.</li> <li>Insurance partner needed.</li> </ul>	<ul style="list-style-type: none"> <li>Lack of insurance expertise and actuarial systems.</li> <li>Need to convince prospective insurance partner controls are in place and appropriate.</li> </ul>	<ul style="list-style-type: none"> <li>Expanding micro-insurance /micro-lending locally.</li> <li>Will micro -credit /micro-insurance products designed for another country fit locally?</li> </ul>

*Source: Research Data*

**Table 5:        Product-Market Attributes for Micro-Credit and Micro-Insurance: Views of MFI Managers**

This table outlines the product-market characteristics that MFI managers consider important for Micro-lending and Micro-insurance products to be successful in promoting sustainable business development and local economic growth.

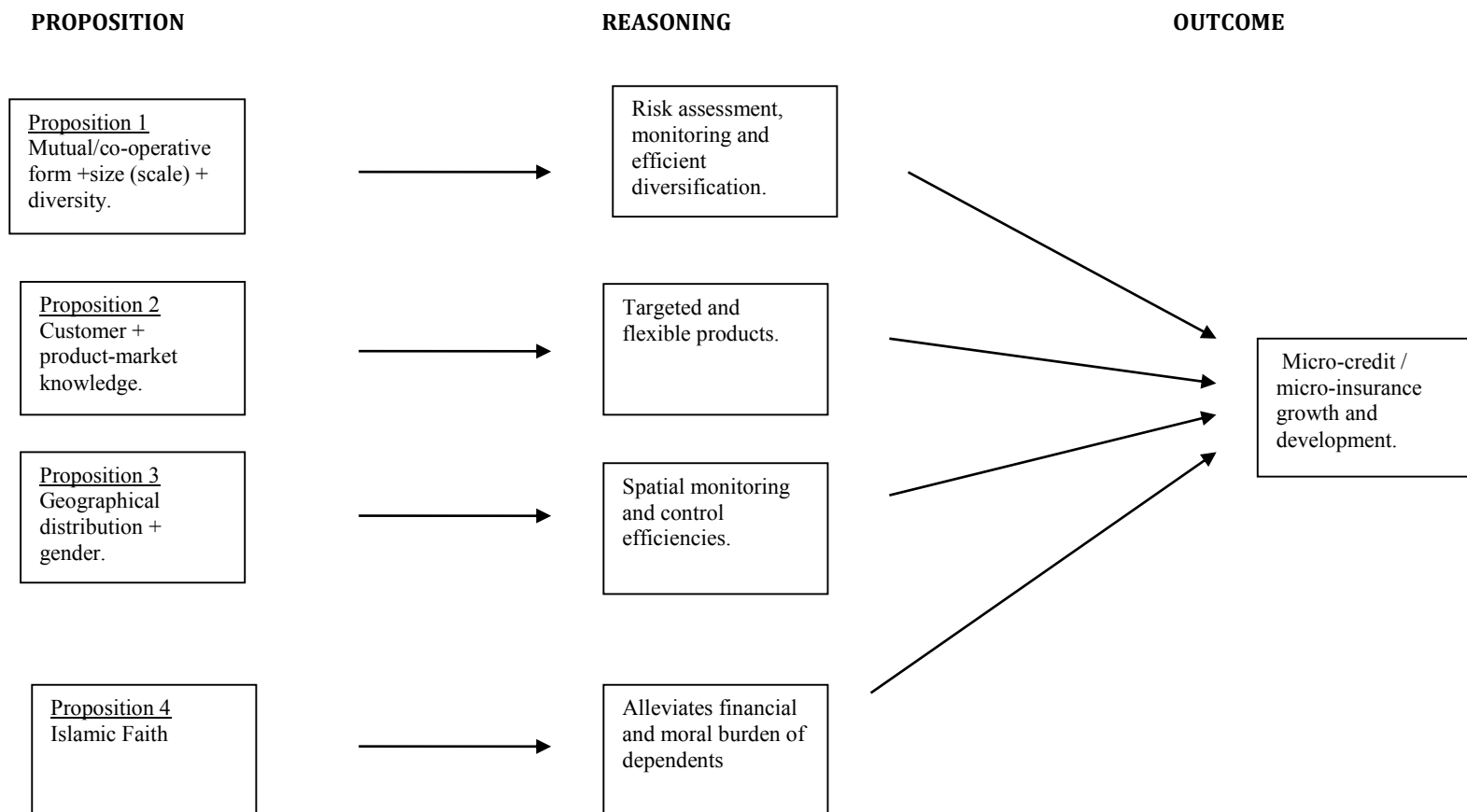
<b>Product-Market Attribute</b>	<b>Key Criteria</b>
<b>Design</b>	<ul style="list-style-type: none"> <li>• Must be simple and unambiguous.</li> <li>• Must fit local social and cultural features (e.g. religious compatibility)</li> <li>• Terms must be clear.</li> </ul>
<b>Risk</b>	<ul style="list-style-type: none"> <li>• Systems of search screening and monitoring need to be effective.</li> <li>• Risk transfer e.g. via micro insurance – Are all relevant risks covered? Are all risks properly priced?</li> </ul>
<b>Distribution</b>	<ul style="list-style-type: none"> <li>• Must be cost effective.</li> <li>• Must limit risk of adverse selection and moral hazard.</li> </ul>
<b>Repayments</b>	<ul style="list-style-type: none"> <li>• Must be cost effective and cost-efficient.</li> <li>• Must be regular.</li> <li>• Loan defaults need to be monitored.</li> <li>• Credit risk transferred (e.g. via micro-insurance).</li> </ul>
<b>Purpose</b>	<ul style="list-style-type: none"> <li>• Must be clear.</li> <li>• Must be potentially beneficial economically.</li> </ul>
<b>Support</b>	<ul style="list-style-type: none"> <li>• Help and advice on micro-credit/micro-insurance.</li> <li>• Office staff must have empathy with the financial needs of low income clients.</li> </ul>
<b>Audit and Control</b>	<ul style="list-style-type: none"> <li>• Micro-lending/Micro-insurance contracts need to be regularly and independently monitored.</li> <li>• Are controls adequate to minimize the risk of moral hazard (fraud)?</li> </ul>
<b>Financial Performance</b>	<ul style="list-style-type: none"> <li>• Are the micro-loans/micro-insurance products profitable and sustainable?</li> <li>• Are scale economies being achieved?</li> </ul>
<b>Market Trends</b>	<ul style="list-style-type: none"> <li>• Must have good local market research to identify current and future business opportunities.</li> <li>• Consider partnerships with other (e.g. insurance) organisations.</li> <li>• Need good regulatory and infrastructural systems (e.g. from Central Bank) to facilitate future growth.</li> </ul>

*Source: Research Data*

**Figure 1:**

**Schematic Representation of Research Findings**

This schematic relates the key propositions and their reasoning behind the future growth and development of micro-credit and micro-insurance identified in the study.



Source: Research Data